

**UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE**

**FIRST AMENDMENT  
TO THE  
CLASSIFICATION AND CORRELATION  
OF THE SOILS OF  
MADISON COUNTY, INDIANA**

**APRIL 2006**

This amendment results from digitizing the Madison County Soil Survey, the update of the NASIS database, and conforming to the Keys to Soil Taxonomy, 9<sup>th</sup> Edition, 2003.

**AMENDMENT NO. 1**

**Soil Correlation** – Add the following map units:

Field <u>symbols</u>	Field map <u>unit name</u>	Publication <u>symbol</u>	Approved map <u>unit name</u>
Limestone Quarry	Limestone Quarry	Uby	Udorthents, loamy
City Dump	City dump	Usl	Udorthents, rubbish
Water, W	Water	W	Water

The "Uby – Udorthents, loamy" map unit is added for an area labeled as “Limestone Quarry” in the published soil survey (Sheet No. 51). This area is no longer used as a quarry, with the pit now being water and the remainder of the area having been disturbed by human activity supporting some vegetation.

The "Usl – Udorthents, rubbish" map unit is added for an area labeled as “City Dump” in the published soil survey (Sheet No. 16). This area is no longer used as a dump and is now supporting vegetation.

**Soil Correlation** – Change the following approved map unit names:

Field <u>symbols</u>	Field map <u>unit name</u>	Publication <u>symbol</u>	Approved map <u>unit name</u>
Cm	Carlisle muck	Cm	Houghton muck, drained, 0 to 1 percent slopes
Lm	Linwood muck	Lm	Palms muck, drained, 0 to 1 percent slopes

The following legend replaces the Soil Legend from the March 1967 Published Soil Survey:

**SOIL MAP LEGEND**  
**Madison County, Indiana: Detailed Soil Map Legend**

Map symbol	Soil name
BoA	Blount silt loam, 0 to 2 percent slopes
BoB2	Blount silt loam, 2 to 6 percent slopes, moderately eroded
Br	Brookston silt loam
Bs	Brookston silty clay loam
CaA	Camden silt loam, 0 to 2 percent slopes
CaB2	Camden silt loam, 2 to 6 percent slopes, moderately eroded
Cm	Houghton muck, drained, 0 to 1 percent slopes
CnA	Celina silt loam, 0 to 2 percent slopes
CnB2	Celina silt loam, 2 to 6 percent slopes, moderately eroded
Cp	Clay pits
CrA	Crosby silt loam, 0 to 2 percent slopes
CrB2	Crosby silt loam, 2 to 6 percent slopes, moderately eroded
Ed	Edwards muck
Es	Eel silt loam
FaA	Fox fine sandy loam, 0 to 2 percent slopes
FaB	Fox fine sandy loam, 2 to 6 percent slopes
FoA	Fox silt loam, 0 to 2 percent slopes
FoB2	Fox silt loam, 2 to 6 percent slopes, moderately eroded
FoC2	Fox silt loam, 6 to 12 percent slopes, moderately eroded
FoD2	Fox silt loam, 12 to 18 percent slopes, moderately eroded
FrA	Fox silt loam, limestone substratum, 0 to 2 percent slopes
FsA	Fox silt loam, till substratum, 0 to 2 percent slopes
FsB	Fox silt loam, till substratum, 2 to 6 percent slopes
FsB2	Fox silt loam, till substratum, 2 to 6 percent slopes, moderately eroded
FsC	Fox silt loam, till substratum, 6 to 12 percent slopes
FsC2	Fox silt loam, till substratum, 6 to 12 percent slopes, moderately eroded
FtC3	Fox soils, 6 to 12 percent slopes, severely eroded
FxB3	Fox soils, till substratum, 2 to 6 percent slopes, severely eroded
Gn	Genesee silt loam
Gr	Gravel pits
HeF2	Hennepin soils, 18 to 35 percent slopes, eroded
Hm	Homer silt loam
Hn	Homer silt loam, limestone substratum
Kc	Kokomo silty clay loam
Kg	Kokomo silty clay loam, gravelly substratum
Km	Kokomo silty clay loam, stratified substratum
Ks	Kokomo mucky silt loam, stratified substratum
Kt	Kokomo mucky silty clay loam, gravelly substratum
Lm	Palms muck, drained, 0 to 1 percent slopes

SOIL MAP LEGEND--Continued  
Madison County, Indiana: Detailed Soil Map Legend

Map symbol	Soil name
Ma	Made land
Mh	Mahalasville silt loam
Ml	Mahalasville silty clay loam
Mm	Mahalasville silty clay loam, limestone substratum
MnA	Miami silt loam, 0 to 2 percent slopes
MnB2	Miami silt loam, 2 to 6 percent slopes, moderately eroded
MnC2	Miami silt loam, 6 to 12 percent slopes, moderately eroded
MnD2	Miami silt loam, 12 to 18 percent slopes, moderately eroded
MnE2	Miami silt loam, 18 to 25 percent slopes, moderately eroded
MpB3	Miami soils, 2 to 6 percent slopes, severely eroded
MpC3	Miami soils, 6 to 12 percent slopes, severely eroded
MpD3	Miami soils, 12 to 18 percent slopes, severely eroded
MpE3	Miami soils, 18 to 25 percent slopes, severely eroded
MrB2	Morley silt loam, 2 to 6 percent slopes, moderately eroded
MrC2	Morley silt loam, 6 to 12 percent slopes, moderately eroded
MrD	Morley silt loam, 12 to 18 percent slopes
MsB3	Morley soils, 2 to 6 percent slopes, severely eroded
MsC3	Morley soils, 6 to 12 percent slopes, severely eroded
MsD3	Morley soils, 12 to 18 percent slopes, severely eroded
OcA	Ockley silt loam, 0 to 2 percent slopes
OcB	Ockley silt loam, 2 to 6 percent slopes
Pc	Pewamo silty clay loam
RdE2	Rodman soils, 12 to 50 percent slopes, eroded
Ro	Ross loam
Rs	Ross silt loam
Sh	Shoals silt loam
Sl	Sleeth silt loam
Sm	Sleeth silt loam, loamy substratum
So	Sloan silt loam
Uby	Udorthents, loamy
Usl	Udorthents, rubbish
Wa	Wallkill complex
Wc	Washtenaw complex
W	Water
Wd	Westland silty clay loam
Ws	Westland silty clay loam, moderately deep

Replace the “Conventional Signs” symbols legend from the published survey, with the attached Indiana Official 37A for Compilation, Digitizing, and DMF, Revised June 30, 2004.

Only the following standard landform and miscellaneous surface features will be shown on the legend and placed on the digitized soil maps:

<u>Feature</u>	<u>Name</u>	<u>Description</u>
ESO	Escarpment, nonbedrock	A relatively continuous and steep slope or cliff, which generally is produced by erosion but can be produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.
GPI	Gravel pit	An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically 0.2 to 2 acres.
GUL	Gully	A small channel with steep sides cut by running water through which water ordinarily runs only after a rain, or after ice or snow melts. It generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.
MAR	Marsh or swamp	A water-saturated, very poorly drained area, intermittently or permanently covered by water. Sedges, cattails, and rushes dominate marsh areas. Trees or shrubs dominate swamps. Not used in map units where the named components are poorly or very poorly drained. Typically 0.2 to 2 acres.
ROC	Rock outcrop	An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map units are shallow over bedrock or where “Rock outcrop” is a named component of the map unit. Typically 0.2 to 2 acres.
WET	Wet spot	A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit. Typically 0.2 to 2 acres.

Only the following ad hoc features will be shown on the legend and placed on the digitized soil maps:

<u>Label</u>	<u>Symbol ID</u>	<u>Name</u>	<u>Description</u>
UWT	44	Unclassified water	Small, natural or man-made lake, pond, or pit that contains water, of an unspecified nature, most of the year. Typically 0.2 to 2 acres.

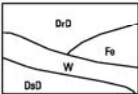



































































Soil Survey Area: MADISON COUNTY

State: Indiana

## FEATURE AND SYMBOL LEGEND FOR SOIL SURVEY

U.S. DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

Date: OCTOBER 2005

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
<b>SOIL SURVEY FEATURES</b>		<b>CULTURAL FEATURES (Optional)</b>		<b>HYDROGRAPHIC FEATURES (Optional)</b>	
<b>SOIL DELINEATIONS AND LABELS</b>		<b>BOUNDARIES</b>		Drainage end (indicates direction of flow)	
		National, state or province		Unclassified stream	
<b>STANDARD LANDFORM AND MORPHOLOGICAL SURFACE FEATURES</b>		County or parish			
Bedrock escarpment		Minor civil division			
Nonbedrock escarpment		Reservation (Military)			
Gully		Land grant (Optional)			
Levee		Field sheet matchline and neatline			
Short steep slope		Public Land Survey System Section Corner Tics			
Blowout		GEOGRAPHIC COORDINATE TICK			
Borrow pit		ROAD EMBLEMS			
Clay spot		Interstate			
Closed depression		Federal			
Gravel pit		State			
Gravelly spot		LOCATED OBJECTS			
Landfill		Airport (Label only)		Davis Airport or Airstrip	
Marsh or swamp					
Mine or quarry					
Rock outcrop					
Sandy spot					
Severely eroded spot					
Sinkhole					
Slide or slip					
Spoil area					
Stony spot					
Very stony spot					
Wet spot					
<b>AD HOC FEATURES (Describe on back)</b>					
LABEL	SYMBOL ID	SYMBOL	LABEL	SYMBOL ID	SYMBOL
DCS	1		CRG	23	
DKS	2		WIA	24	
QVW	3		CGW	25	
VWS	4		HIL	26	
EAS	5			27	
MAS	6		SIO	28	
SAS	7			29	
CAP	8		WUC	30	
CAL	9			31	
SLR	10			32	
DUM	11			33	
DRV	12			34	
BRW	13		WRL	35	
BRD	14			36	
ODR	15			37	
SGR	16		SAH	38	
LBR	17			39	
WOP	18		VSE	40	
SBR	19			41	
COB	20			42	
CWS	21			43	
FES	22		UNT	44	

**Replace the Classification of the Soils** table with the following, amended per Keys to Soil Taxonomy 9<sup>th</sup> edition:

Madison County, Indiana

Taxonomic Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series.)

Soil name	Family or higher taxonomic class
Blount-----	Fine, illitic, mesic Aeric Epiaqualfs
Brookston-----	Fine-loamy, mixed, superactive, mesic Typic Argiaquolls
Camden-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Celina-----	Fine, mixed, active, mesic Aquic Hapludalfs
Crosby-----	Fine, mixed, active, mesic Aeric Epiaqualfs
Edwards-----	Marly, euic, mesic Limnic Haplosaprists
Eel-----	Fine-loamy, mixed, superactive, mesic Fluvaquentic Eutrudepts
Fox-----	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs
*Fox-----	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
*Fox-----	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Genesee-----	Fine-loamy, mixed, superactive, mesic Fluventic Eutrudepts
Hennepin-----	Fine-loamy, mixed, active, mesic Typic Eutrudepts
Homer-----	Fine-loamy over sandy or sandy-skeletal, mixed, active, mesic Aeric Endoaqualfs
Houghton-----	Euic, mesic Typic Haplosaprists
Kokomo-----	Fine, mixed, superactive, mesic Typic Argiaquolls
Mahalasville-----	Fine-silty, mixed, superactive, mesic Typic Argiaquolls
Miami-----	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs
*Miami-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Morley-----	Fine, illitic, mesic Oxyaquic Hapludalfs
Ockley-----	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Palms-----	Loamy, mixed, euic, mesic Terric Haplosaprists
Pewamo-----	Fine, mixed, active, mesic Typic Argiaquolls
Rodman-----	Sandy-skeletal, mixed, mesic Typic Hapludolls
Ross-----	Fine-loamy, mixed, superactive, mesic Cumulic Hapludolls
Shoals-----	Fine-loamy, mixed, superactive, nonacid, mesic Fluventic Endoaquepts
Sleeth-----	Fine-loamy, mixed, active, mesic Aeric Endoaqualfs
Sloan-----	Fine-loamy, mixed, superactive, mesic Fluvaquentic Endoaquolls
Udorthents-----	Udorthents
Wallkill-----	Fine-loamy, mixed, superactive, nonacid, mesic Fluvaquentic Humaquepts
Washtenaw-----	Fine-loamy, mixed, active, nonacid, mesic Aeric Fluvaquents
Westland-----	Fine-loamy, mixed, superactive, mesic Typic Argiaquolls

\*Fox fine-silty taxadjunct is for map unit FrA

\*Fox fine-loamy taxadjunct is for map units FsA, FsB, FsB2, FsC, FsC2 and FxB3

\*Miami taxadjunct is for map units MnE2 and MpE3

**MADISON COUNTY, INDIANA  
AMENDMENT NO. 1**

**Approval Signatures and Date**

\_\_\_\_\_  
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Indianapolis, Indiana

\_\_\_\_\_  
Date

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J. XAVIER MONTOYA  
Acting State Conservationist  
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\_\_\_\_\_  
Date